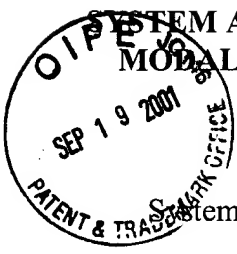


#4



SYSTEM AND METHOD FOR GENERATING AND PRESENTING MULTI-MODAL APPLICATIONS FROM INTENT-BASED MARKUP SCRIPTS

ABSTRACT OF THE DISCLOSURE

Systems and methods for rendering modality-independent scripts (e.g., intent-based markup scripts) in a multi-modal environment and, in particular, to a multi-modal user interface for an application, whereby the user can interact with the application using a plurality of modalities (e.g., speech and GUI). The multi-modal interface automatically synchronizes I/O events over the plurality of modalities presented. In one aspect, the system provides immediate, synchronized rendering of the modality-independent document in each of the supported modalities. In another aspect, the system provides deferred rendering and presentation of intent-based scripts to an end user, wherein the system comprises a transcoder for generating a speech markup language script (such as a VoiceXML document) from the modality-independent script and rendered (via, e.g., VoiceXML browser) at a later time.

For the purpose of this document